

ABSTRACT

A bistable nematic liquid crystal display device comprises two cell walls enclosing a layer of nematic liquid crystal material having finely divided solid particles dispersed therein. At least one electrode on each cell wall applies an electric field across at least some of the liquid crystal material. Surface alignments on the inner surface of both cell walls induce adjacent molecules of the liquid crystal material to adopt desired orientations. The liquid crystal material adopts two different stable molecular configurations according to the polarity of applied electric field pulses.